REMARKS

The indication that claims 2, 3 and 6 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims, is acknowledged. Applicants note that claims 2, 3 and 6 have been retained in dependent form at this time, with independent claims 1, 4 and 5 being amended to clarify the features of the present invention, and applicants submit that claim 1 and the dependent claims should now be in condition for allowance, as will become clear from the following discussion.

Additionally, by the present amendment, new dependent claims 7 and 8 have been added, which recite features as illustrated in Figs. 3 and 4 of the drawings of this application.

Also, submitted herewith is a drawing correction and corrected drawing for Fig. 3 wherein, as recognized by the Examiner in accordance with the description in the specification, the reflection portion is revised to indicate reference numeral 15, while the transmission portion is revised to indicate the transmission portion as reference numeral 16. Thus, by this amendment, the objection to the disclosure should now be overcome.

As to the rejection of claims 1, 4 and 5 under 35 U.S.C. 102(e) as being anticipated by Eriguchi (US 5,985,032), this rejection is traversed insofar as it is applicable to the present claims, and reconsideration and withdrawal of the rejection are respectfully requested.

At the outset, as to the requirements to support a rejection under 35 U.S.C. 102, reference is made to the decision of In re Robertson, 49 USPQ 2d 1949 (Fed. Cir. 1999), wherein the court pointed out that anticipation under 35 U.S.C. §102 requires that each and every element as set forth in the claim is found, either expressly or inherently described in a single prior art reference. As noted by the court, if the prior art reference does not expressly set forth a particular element of the

claim, that reference still may anticipate if the element is "inherent" in its disclosure. To establish inherency, the extrinsic evidence "must make clear that the missing descriptive matter is necessarily present in the thing described in the reference, and that it would be so recognized by persons of ordinary skill." Moreover, the court pointed out that inherency, however, may not be established by probabilities or possibilities. The mere fact that a certain thing may result from a given set of circumstances is not sufficient.

In accordance with the present invention as illustrated in Figs. 1 and 2 of the drawings of this application, the present invention is directed to a monitoring apparatus for detecting a thickness of a layer represented by the deposited layer 11 of Fig. 2 which is deposited on an inner wall surface of a processing chamber 1 of a drive processing apparatus. As illustrated, a measurement window 2 is formed in the inner wall surface of the processing chamber and which can transmit light and means are provided for irradiating the measurement window 2 with measurement light from a light source 3 at an incident angle that the measurement light is totally reflected by an inner surface of the measurement window on the side of the inner wall surface of the processing chamber. In accordance with the present invention, detection means in the form of a TV camera 9 and a lens 8, for example, are provided for focusing the measurement light passing along the optical axis 14 as shown in Fig. 2 which is passed through the inside of the layer 11 deposited on the inner surface of the measurement window and reflected from the inner surface of the processing chamber 1 to detect the measurement light. Furthermore, as recited in claim 1, a deposited layer evaluation unit 10 serves as means for evaluating the layer deposited on the inner surface of the measurement window on the basis of a detection result of the detection means. Thus, as described in connection with Fig. 2, when a deposit layer 11 is formed on the surface 2a of the measurement window 2, measurement light irradiating the transmission portion 16 in the surface 2a along an optical axis 12 is not totally reflected by an inner face between the measurement

window 2 and the deposited layer 11, but passes through the deposited layer 11 and is totally reflected by a surface 11a of the deposited layer to be returned along a path defined by an optical axis 14. Applicants submit that these features are now recited in independent claims 1, 4 and 5 and are not disclosed or taught Eriguchi (US 5,985,032).

In setting forth the rejection, the Examiner refers to Fig. 15 of Eriguchi, measurement window (40), means for irradiating the measurement window (48), an incident angle that the measurement light is totally reflected by an inner surface of the measurement window (col. 14, lines 57-65), detection means (44) and means for evaluating the layer deposited on the inner surface of the measurement window on the basis of a detection result of the detection (71). However, applicants note that Eriguchi discloses reflecting a light of which a part of wavelength is absorbed in a deposited layer by fully reflection at an inner wall surface, thereby measuring the layer of thickness by measuring the amount of absorption, referring to the Abstract, for example. See also, for example, col. 13, lines 2-20. Thus, applicants submit that Eriguchi does not provide for measurement of the measurement light passed through inside of the layer deposited on the inner surface of said measurement window and reflected from the inner surface of the processing chamber as now recited in independent claims 1, 4 and 5 and therewith the dependent claims of this application. Thus, applicants submit that claims 1, 4 and 5, as amended, patentably distinguish over Eriguchi (US 5,985,032) in the sense of 35 U.S.C. 102 and should be considered allowable thereover.

As to newly added dependent claims 7 and 8, applicants note that Eriguchi does not disclose or teach a plurality of reflecting patterns arranged in the manner defined as recited in claims 7 and 8 and illustrated in Figs. 3 and 4. Thus, these claims further patentably distinguish over Eriguchi and should be considered allowable thereover.

In view of the above amendments and remarks, applicants submit that in addition to objected to claims 2, 3 and 6, independent claim 1, as amended, and dependent claims 4, 5, 7 and 8 patentably distinguish over the cited art, and should now be considered allowable thereover. Accordingly, issuance of an action of a favorable nature is courteously solicited.

To the extent necessary, applicant's petition for an extension of time under 37 CFR 1.136. Please charge any shortage in the fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account No. 01-2135 (500.40120X00) and please credit any excess fees to such deposit account.

Respectfully submitted,

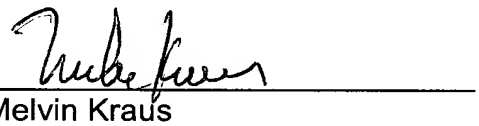

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FIG. 3

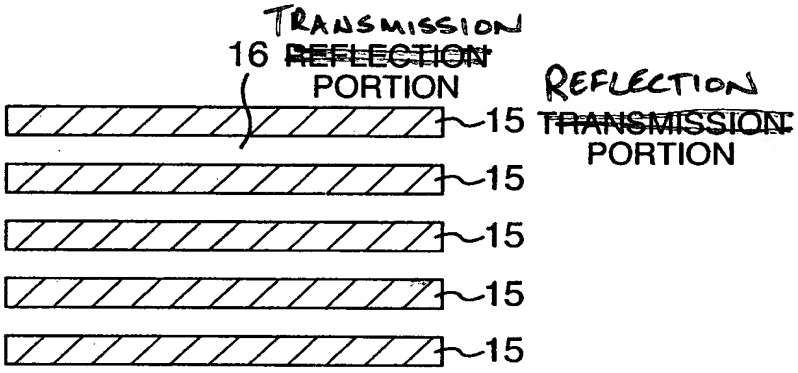

FIG. 4